

ACC NR: AP/000022

SOURCE CODE: UR/0051/66/021/005/0525/0531

AUTHOR: Golubovskiy, Yu. B.; Kagan, Yu. M.; Lyagushchenko, R. I.

ORG: none

TITLE: Spectroscopic and probe investigation of a pinched discharge column. II

SOURCE: Optika i spektroskopiya, v. 21, no. 5, 1966, 525-531

TOPIC TAGS: gas discharge, plasma pinch, line intensity, neon, argon, spectral distribution, pressure effect

ABSTRACT: Part I was devoted to the radial variation of the characteristics of a pinched discharge column (Opt. i spektr. v. 20, 561, 1966). The present investigation is devoted to the radial distribution of the line intensities and a comparison with theory. The theoretical formulas for the comparison were derived by the authors earlier (ZhETF v. 34, 1873, 1964). The measurements were made in the positive column of neon and argon at the same current and pressure intervals as in part I, but the discharge tube was different in that there were no probes and there were two flat windows on the ends. The radial intensity distribution was investigated in neon in the lines 6929, 6506, 5764, and 5330 Å, and in argon in the lines 7503, 4300, 4259, 6871, 5888, and 5187 Å. The line intensity was corrected for reabsorption in the usual manner. The experiment has shown that the radial dependence of the different line intensities agreed within the limits of errors. The contraction of the pinch increased with increasing pressure for all lines. A decrease in the current likewise

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UDC: 537.523/.527

ACC NR: AF7000022

resulted in contraction of the pinch. The experimental results are found to agree with theoretical calculations of the light flux distribution with allowance for the finite dimensions of the monochromator slit and other factors. Orig. art. has: 12 figures and 3 formulas.

SUB CODE: 20/ SUBM DATE: 27Jan65/ ORIG REF: 003

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ACCT No: 146050176

SOURCE CODE: UR/0237/66/000/003/0003/0013

AUTHOR: Golubovskiy, Yu. M.

ORG: none

TITLE: Calculation of characteristics of a photoelectric system with light modulation governed by the variation of the controlled quantity

SOURCE: Optiko-mekhanicheskaya promyshlennost', no. 8, 1966, 8-13

TOPIC TAGS: photoelectric detection, light modulation, automatic control system, signal to noise ratio, light interference

ABSTRACT: This is a continuation of earlier work (Optiko-mekhanicheskaya promyshlennost', 1966, no. 7, p. 15) dealing with the design characteristics of an amplitude-dependent photoelectric system for measurement of linear or angular quantities. The present article is devoted to the calculation of the sensitivity and the signal/noise ratio of a photoelectric device measuring the angle between the axes of an analyzer and a polarizer, and also for a device measuring the displacement of an interference pattern. The sensitive element is modulated by a light flux which varies periodically in proportion to the controlled quantity. Recommendations are presented on the choice of the modulation amplitude of the modulating element and the width of the slit that scans the interference pattern. The results make it possible to determine the theoretical threshold sensitivity of the device. The operating principle of the devices themselves is not considered, but references to papers in which they are described are given. Orig. art. has: 15 figures and 28 formulas.

SUB CODE: 14/ SUBM DATE: 27Mar65/ ORIG REF: 005/ OTH REF: 003  
Card 1/1 07/ UDC: 53.089.4: 621.383

"APPROVED FOR RELEASE: 06/13/2000

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ACC NR: AP6015693

SOURCE CODE: UR/0413/66/000/009/0090/0091

INVENTOR: Golubovskiy, Yu. M.

ORG: None

TITLE: A two-coordinate photoelectric angle-data transmitter. Class 42, No. 181336

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 9, 1966, 90-91

TOPIC TAGS: angle measurement instrument, photoelectric cell, electronic measurement, prism, optic equipment component

ABSTRACT: This Author's Certificate introduces a two-coordinate photoelectric angle-data transmitter which contains an autocollimation system, a color selective prism made in the form of a truncated tetrahedral pyramid, and photocells located in the pencils of rays reflected from the lateral faces of the prism. The transmitter is designed for improved stability. One of the photocells located in the pencil of rays passing through the cutoff section of the prism generates a signal proportional to the angle of inclination of the mirror with respect to the amplitude of the modulated luminous flux, while the other two cells located in the pencils of rays reflected from the lateral faces of the prism serve as reference voltage generators. The light beam from an inclined rotating mirror is used for scanning.

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UDC: 531.743



GOLUBSKI, Z.E.; GLOWIAK, B.

The preparation of phosphonothioic dichloride. Bul chim PAN  
12 no.7:471-474 '64.

1. Department of Sanitary Chemistry of Wroclaw Technical  
University. Submitted May 15, 1964.



GOLUBSOVA, R.B.  
CA

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New method for determination of molybdenum in steels  
by means of  $\beta$ -naphthoquinoline. R. B. Golubsova and  
F. M. Shemyakin. *Zhur. Anal. Khim.* 4, 213-3 (1949);  
cf. C.A. 43, 7372a.  $\beta$ -Naphthoquinoline pptd. Mo  
completely in concns. of 0.45-3.6%. The sepn. of W and  
Mo by means of  $\beta$ -naphthoquinoline depends on the  
acidity of the medium. Mo is pptd. in a weakly acid  
(litmus) medium. M. Hosh

S/509/62/000/010/004/005  
I003/I203

AUTHOR: Golubtasova, P.B.

TITLE: A new electrolyte for the deposition of the metallic compound  $\text{Ni}_3\text{Nb}$  from nickel alloys containing niobium

SOURCE: Akademiya nauk SSSR. Institut metallurgii. Trudy, no. 10. Moscow, 1962, 215-216. Metallurgiya, metallovedeniye, fiziko-khimicheskiye metody issledovaniya

TEXT: The new electrolyte contains 5 g of oxalic acid; 50 ml of HCl and 1000 ml of methyl alcohol. The electrolyte was cooled to  $-2^\circ\text{C}$  with a mixture of ice and NaCl, and the electrolysis carried out for 30 min with a current density of  $0.3 \text{ amp/cm}^2$ .

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I003/I203

A new electrolyte for the....

Cooling of the electrolyte considerably inhibits oxidation at the anode. The presence of  $\text{Ni}_3\text{Nb}$  in the anodic deposit was confirmed by microscopic and X-ray analysis. There is 1 table.

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GOLUBTSEV, V. A.

94-58-6-12/19

AUTHOR: An Editorial note on p 18 is followed by contributions to the discussion by a number of authors.

TITLE: Discussion on the Design of Medium and Low Output Industrial Power Stations (Diskussiya po voprosu proyektirovaniya promyshlennykh elektrostantsiy sredney i maloy moshchnosti)

PERIODICAL: Promyshlennaya Energetika, 1958, Nr 6, pp 18-33 (USSR)

ABSTRACT: Editorial note p 18

The unsatisfactory position in the equipment, design and construction of small and medium industrial power stations is seriously retarding power development. In Promyshlennaya Energetika, 1956, Nr 9, M. I. Lavrov published an article for discussion on this subject. We must agree with Lavrov that the standard designs issued by Promenergoprojekt are unsatisfactory and new types of industrial Heat and Electric power stations are required. Small, costly, inefficient power stations are displacing small and medium heat and electric power stations simply because these latter are too big and complicated. Small and medium power stations should be cheap and simple and their design should be thoroughly reviewed. Industrial

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Discussion on the Design of Medium and Low Output Industrial Power Stations

gas turbines should be introduced. In the discussion published below there are no contributions from Works making power equipment and they and staff of Councils of National Economy are asked to join in.

Professor Golubtsov, V. A. (Corresponding Member, Academy of Science USSR), pp 18-20

Work on the development of cheap and simple industrial power stations is lagging. In 1952, at MONITOE M.I. Lavrov made a number of suggestions about drawing up new types of medium and small industrial power stations, and in 1956 he published an article on the subject in Promyshlennaya Energetika, Nr 9, based on his earlier report. In the intervening five years a number of his ideas had been confirmed but they had never been adequately discussed. Concerning Lavrov's article, it is a good idea to have individual feed arrangements for each set; it is inadvisable to have more than one steam reduction and cooling installation because of the equipment and piping required. Lavrov's comments on the poor characteristics

Card 2/11 of feed pumps are correct. Small instruments are required

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so that control panels can be made cheaply. The proposal to reduce the size of deaerator tanks requires further consideration. The use of semi-outdoor construction is progressive. The question of local mechanisation and avoidance of the use of bridge cranes is important, neither is a crane needed in the boiler house. It is correct to lighten the turbine foundations and the building structure. Some underground communications must, however, be retained. Not all the author's suggestions are fully worked out or acceptable, the main thing is that he has come up with new and critical ideas.

Zakh, R. G., Candidate of Technical Science (All-Union Engineering-Constructional Correspondence Institute) pp20-21. It is very necessary to revise the construction of power stations of 8 to 12 MW and Lavrov's proposals are generally acceptable. In smaller power stations use should be made of steam at 130 - 140 atms, 535-565°C using pearlitic class steel. Detail proposals are made for simplification of the thermal circuit of the power station. Boiler houses Card 3/11 can be simplified when burning pulverised fuel.

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Standardisation of boiler sets is discussed. Air heaters should be made smaller. Forced circulation boilers of Lamont type should be introduced because they are smaller. Construction should be speeded up using prefabricated standardised concrete parts. Unit type sets made within the limitations of the railway loading gauge can help to make construction cheaper.

Khaldeyev, P. I., Engineer (Giprosakhar)

It is important to cheapen and simplify small power stations because of the large number of heat and electric power stations that it is proposed to build. Lavrov's cost curve should not rise so steeply for small sets, because small sets are simple and of low capital cost. A revised cost curve for small heat and electric power stations is given in Fig.1. Capital costs of types 1 and 2 heat and electric power stations are tabulated and the reduced costs that result from fuel and ash handling and water supply in type 1 stations is evident, capital savings are up to 22%. Question of fuel and ash handling and water treatment are then discussed in detail. Ammonia-sodium cation treatment is recommended as being simpler

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for sugar works than H-Na cation treatment, this ammonia process should be widely used in other branches of industry. Effective measures must be taken to keep ammonia out of the steam. The use of back pressure turbines is recommended. The use of pre-assembled distribution equipment for 6 kV makes it possible to simplify the main distribution equipment. Layout of electrical control and distribution gear is discussed. Fuel handling problems are then considered. The arrangement of power stations of 6 - 8.5 MW shown in Fig.2 is in accordance with the principles explained, of the two arrangements given the first is to be preferred. Most of Lavrov's suggestions for making stations cheaper and simpler are agreed with. Medium power stations should combine the practice of large and of small stations, but hitherto they have been based only on that of large stations. Some of Lavrov's ideas are debatable. Unit arrangement of feed means having more feed pumps and deaerators. Whilst unit working of turbines and boilers is desirable the necessary uniformity of loading cannot

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always be achieved in industrial stations. If feed lines are not linked full use cannot be made of deaerator capacity of lightly loaded sets. Central control of the thermal and mechanical part of the station is very desirable, but cannot be achieved in most small stations with chain grate stokers with fuel of variable quality because complex automation is not possible. A number of requirements for the near future are listed: load factors should be improved by combining different types of loading; fuel should be delivered in loads equal to about half the storage capacity; equipment suitable for outdoor operation should be supplied; other improvements are listed.

Tager, S. A., Candidate of Technical Science (Power Institute, Ac. Sc. USSR) pp 25-27.

Small and medium power stations have, in recent years, been built on the model of large regional power stations, which is a mistake. Much work is required to make industrial power stations cheaper and simpler. The physical arrangement of deaerators and water treatment

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plant is discussed. The idea of unit construction of boiler, turbine, deaerator, feed pump, reduction and cooling plant is hardly suitable for small and medium stations, partly because the various components must be convenient and reliable. It is often quite impossible to give each set its own reduction and cooling installation. Boiler house layout is discussed, the arrangement without basement is preferred. The climatic conditions of the USSR do not favour open air boiler houses as a general solution. Plant sizes can be cut down and boiler costs reduced. For burning small fuel, furnaces with liquid slag removal offer promise, particularly cyclone furnaces and other types recently rig tested at the Power Institute, Ac.Sc., USSR. Modern mechanised chain grate furnaces must be used. Their advantages are described. The main reason why they have not been used more extensively is that existing Soviet designs are out of date. Chain grates can be used to burn coal with high fines content, and they have been used with success for many years at the Chelyabinsk Regional Electric Power

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Station, burning local brown coal. The new method of burning hot fine fuel, developed by the Power Institute, Ac.Sc. USSR makes possible complete combustion of material carried over and trapped in gasways and ash arresters. A further factor hindering the introduction of chain grate stokers is the disorganisation of fuel supply which leads to wide variations in fuel quality at any particular power station, so that the plant has to be about universal - greater uniformity of fuel quality is required. Meanwhile the fuel balance is changing, and fuel oil and natural gas are particularly suitable fuels for small power stations. In view of this changing situation small power stations should be designed to run on natural gas and oil fuel and gas turbine and diesel stations should be designed. Because of its scattered nature there is no research or design institute for industrial power supply and there should be.

Kachinskiy, R. K. (Engineer) (Ukrgiprosakhar), p 28

Card 8/11 The unit system of operation is supported on grounds of reliability and economy. Pressures of 60-80 atms should

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be used for power stations of 8 - 12 MW. Unit feed lines are desirable, but there should be automatic connection of spare feed pumps. Fuel handling equipment can be simplified. The standards of the Boiler Inspectorate should be simplified.

Kuritsyn, F. F. pp 28-29

It is most important to estimate industrial loads correctly or the station will be underloaded, alternative forms of power and heat supply should be fully considered. Existing constructional standards are in urgent need of revision and are retarding the work of design organisations. Not enough attention is paid to the demands of the final customer. In Light Industry during the 5th Five Year Plan not a single project put up by TEP and Promenergoprojekt for power stations passed without important changes of output or construction and in some cases they were rejected outright. A number of industrial power stations started up in the last few years are only running on half load.

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Lavrov, M. I. (Promenergoprojekt), pp 29-33

The original author then sums up the discussion at some length. An industrial power station may take 1-2 years to design and 2-5 years to construct, which is too long. Therefore, all sorts of locomobiles, diesels and power trains are installed and they are very inefficient and expensive. This is also the reason for the rapid increase in small and inefficient boiler houses. Examples of this are given. Most of the proposals contained in the original article receive general support. Objections are raised against the use of unit construction because of the difficulty of regulating the loads on the units, or because more feed pumps are needed. However, load distribution and regulation really only needs special consideration when loads are unusually variable. Careful comparisons have shown that in fact unit schemes do economise on materials and equipment. The main difficulty with unit schemes is to cover the heat load and the use of special boilers for this purpose is recommended; such boilers are in fact being widely installed. Many of the

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suggestions made in the article have proved themselves in practice but are still not being widely adopted. The various recommendations are then repeated and reinforced. Objections against semi-outdoor boiler houses are met with the reply that the Ministry of Electric Power Stations has recommended their use for large stations in a number of climatic regions and has recommended outdoor installation of induced draught fans and ash arresters in all regions. All that then remains of the boiler house is the bunkers and ash handling equipment. When power stations are reconstructed it is often not possible to use the old boiler houses. Progress that is being made in the use of higher steam conditions is described, but it is not yet fast enough. In the discussion objections were raised to the proposal to avoid underground services and in reply accounts are given of practical experience with the recommended construction. A number of further recommendations are then summarised under the following headings: fuel and boiler room; machine room; Heat and Electric Power Stations as a whole; construction; and auxiliary shops. There are 2 figures and 2 tables.

1. Industrial plants-USSR
2. Power plants-Operation-USSR
3. Power plants-Design
4. Power plants-Economic aspects
5. Power plants-Standardization

Card  
11/11

USSR / Plant Physiology. Respiration and Metabolism. 1-2

Abs Jour: Ref Zhur-Biol., 1958, No 16, 72553.

Author : Golubtseva, M. V.

Inst : Odessa University.

Title : Role of Carotinoids in the Oxidizing-Restoring Processes in Plants.

Orig Pub: Nauchn. yezhegodnik. Odessk. un-t, 1956, Odessa, 1957, 205-206.

Abstract: The accumulation of carotin and its oxidizing effect was studied as well as the activity of the oxidizing enzymes in the process of formation and ripening of carrot roots. In proportion to the accumulation of carotin, its oxidizing effect was strengthened; the activity of peroxidase was decreased; the activity of the ascorbinoxidase hardly changed. In the Belaya zelenogolovaya carrot roots, which were

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MALINOVSKIY, A.A.; GOLUBTSEVA, M.V.; SHAPOSHNIKOV, V.I.

Effect of tissue implantations on the relationship of inhibition and excitation in the central nervous system of rats. Uch. zap. UNIGB 4:160-175 '58. (MIRA 12:6)

1. Ukrainskiy eksperimental'nyy institut glaznykh bolezney i tkanevoy terapii imeni akademika V.P. Filatova.

(TISSUE EXTRACTS) (NERVOUS SYSTEM)



GOLUBTSEVA, M. V. Cand Biol Sci -- (diss) <sup>Participation</sup> ~~The part~~ <sup>carotenes</sup> of carotin in oxidation-reduction processes in plants." Odessa, 1959. 18 pp with graphs. (Min of Higher Education UkSSR. Odessa State Univ im I. I. Mechnikov), 150 copies (KL, 43-59, 122)

-25-

GOLUBTSOV, B.L., inzh.; LEBEDNEVA, V.I., inzh.

Inspection of electric contacts. Elek. sta. 29 no.2:93-94 F '58.  
(Electric engineering) (MIRA 11:3)

GOLUBTSOV, F.S.

Hamartoma of the lung. Zdrav. Turk. 3 no.6:30-31 N-D '59.

(MIRA 13:5)

1. Iz kafedry propedevticheskoy khirurgii (sav. - prof. N.M. Tachmuradov) Turkmenskogo gosudarstvennogo meditsinskogo instituta im. I.V. Stalina.

(LUNGS--TUMORS)

AUTHOR: Golubtsov, I.

107-5-18/54

TITLE: Oxifers (Oksifery)

PERIODICAL: Radio, 1956, Nr 5, p 16 (USSR)

ABSTRACT: A general description of oxide ferromagnetic materials is presented.  
A brand P4 Soviet material is claimed to be suitable for wide-band  
transformers (100 to 16,000 kc) and pulse transformers (carrying pulses  
shorter than 0.1 microseconds).  
There is one figure in the article.

AVAILABLE: Library of Congress

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BAZILEVICH, K.V., redaktor; GOLUBTSOV, I.A., redaktor; ZINOV'YEV, M.A.,  
redaktor

[Historical atlas of the U.S.S.R.] Atlas istorii SSSR. Pod obshchei  
redaktsiei K.V.Bazilevicha, I.A.Golubtsova, M.A.Zinov'eva. Moskva,  
Glavnoe upravlenie geodesii i kartografii MVD SSSR, 1954. (MLRA 8:2)  
(Russia--Historical geography--Maps)

GOLUBTSOV, I. V.  
Category : USSR/Magnetism - Ferrites

F-5

Abs Jour : Ref Zhur - Fizika, No 1, 1957 No 1438

Author : Golubtsov, I.V.

Title : ~~Experimental Study~~ of Magnetostriction Resonators Made of Ferrites.

Orig Pub : Vestn. Mosk. un-ta, 1956, No 2, 45-48

Abstract : Using toroidal specimens of "oxyfer" ferrites, a study was made of the dependence of the magnetostriction resonance on the value of the constant magnetizing field and on the amplitude of the alternating magnetizing field. The fact that the magnetostriction-resonance frequency depends little on the permanent magnetizing field is most probably due to the increase in the modulus of elasticity caused by magnetization. The resonant frequency is independent of the amplitude of the alternating field. The dependence of the effect of magnetostriction on the amplitude of the alternating field and on the magnetizing field is explained with the aid of the static magnetostriction vs. magnetic field curve. The equivalent Q increases with the permanent field and reaches a maximum when the magnetizing field exceeds the amplitude of the alternating field. Further increase in the magnetizing field causes the Q to decrease, owing to the shift to the non-linear section of the magnetostriction curve as saturation is approached.

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GOLUBETSOV, I. V.

CHISTYAKOV, Yu.D.; GOLUBETSOV, I.V.; PRISHLKOV, Yu.A.

Meter for recording torsional and oscillatory movements of a  
viscosimeter pendulum. Zav.lab.22 no.7:876-877 '56. (MLRA 9:12)

1. Moskovskiy institut tsvetnykh metallov i zolota imeni M.I.Kalinina.  
(Viscosimeter) (Recording instruments)





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S/153/60/003/004/001/006  
B004/B058

21.3000  
5.2100

AUTHORS: Golubtsov, I. V., Lapitskiy, A. V., Shiryayev, V. K.

TITLE: The Problem of the Volatility of Niobium Oxides<sup>21</sup>

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Khimiya i  
khimicheskaya tekhnologiya, 1960, Vol. 3, No. 4, pp. 571-574

TEXT: This paper was read at the 1st Intercollegiate Conference on  
Radiochemistry, Moscow, April 20-25, 1959. It was the aim of the authors  
to measure the pressure of saturated vapors of  $Nb_2O_5$  and  $NbO_2$  in the  
temperature range of 1489 - 1905°K by using  $Nb^{95}$ . A vacuum furnace of the  
type МВП-3М (MVP-3M) and a Knudsen effusion chamber (Fig. 1), the  
aperture and container of which were interchangeable and could consist of  
molybdenum, tungsten or ceramics, served as testing apparatus. The scheme  
of the absorption apparatus made of quartz and tungsten is shown in Fig.2.  
The temperature of the effusion chamber was measured with an optical  
ОПИИР-09 (OPIIR-09) pyrometer. In addition to the Knudsen method, the  
vapor pressure of  $N_2O_5$  was also measured by the flow method. The apparatus

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B004/B058

used consisted of the MVP-3M furnace, the reaction tube, the installation for air drying, and a gasometer of the Patrikeyev system, type УГСП-1 (UGSP-1). Niobium metal was dissolved, converted into the oxalate complex, precipitated with tannic acid after the addition of  $Nb^{95}$ , and annealed to  $Nb_2O_5$ .  $NbO_2$  was obtained from  $Nb + Nb_2O_5$  in the ТГВ-1 (TGV-1) furnace at

$10^{-4}$  torr by heating up to  $1250^{\circ}C$ . The specific activity of the preparations was determined by means of a gamma tube of a Б-2 (B-2) apparatus. The data for  $NbO_2$  are listed in Table 1, Fig. 3, those for  $Nb_2O_5$  in

Table 2, Fig. 3. X-ray examinations showed that  $NbO_2$  was stable under the

experimental conditions, and that the container material (molybdenum, tungsten, ceramics) had no influence on the results. For  $Nb_2O_5$ , the X-ray

picture showed the appearance of  $NbO_2$  above  $1150^{\circ}C$ . A thermal dissociation, therefore, takes place in vacuum at high temperatures:

$Nb_2O_5 = 2NbO_2 + \frac{1}{2}O_2$ . The authors thank Yu. P. Simanov for his advice, and L. P. Belykh, V. A. Galushkin, and V. G. Pakhomov for assembling the

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apparatus. There are 3 figures, 2 tables, and 5 references: 1 Soviet,  
1 French, and 3 German.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova,  
Laboratoriya radiokhimii (Moscow State University imeni  
M. V. Lomonosov, Laboratory of Radiochemistry)

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L 27812-66 ~~EMP(m)/EMP(t)/EMP(b)~~ ~~ISF(c)~~ ~~ID/JQ~~  
ACC NR: AP5027908 SOURCE CODE: UR/0189/65/000/005/0031/0033

AUTHOR: Golubtsov, I. V.; Nesmeyanov, An. N. 15  
B

ORG: Moscow State University, department of radio chemistry (Moskovskogo universiteta, kafedra radiokhimii)

TITLE: Investigation of evaporation of tungsten, molybdenum, and tantalum in vacuum. 44-5, 27 44-5, 27 44-5, 27

SOURCE: Moscow. Universitet. Vestnik. Seriya II. Khimiya, no. 5, 1965, 31-33

TOPIC TAGS: tungsten, molybdenum, tantalum, metal evaporation, tungsten evaporation, molybdenum evaporation, tantalum evaporation, vacuum evaporation

ABSTRACT: The evaporation rate of W, Mo, and Ta in a vacuum of  $8 \cdot 10^{-9}$ — $2 \cdot 10^{-4}$  mm Hg has been investigated. Specimens of zone-melted, high-purity metals marked with radioactive isotopes  $\text{Mo}^{99}$ ,  $\text{W}^{185}$ , and  $\text{Ta}^{182}$  were heated to 2063—3203K by passing an electric current or by electron bombardment. It was found that as the pressure dropped to  $10^{-4}$ — $10^{-6}$  mm Hg, the evaporation rate of all tested metals increased. A further pressure drop below  $10^{-6}$ — $10^{-7}$  mm Hg brought about considerably weaker additional effect. The composition of residual gases also affects the evaporation rate. At a pressure of  $10^{-7}$  mm Hg and lower the evaporation proceeds in the form of molecules; at higher pressures, such as  $10^{-4}$  mm Hg, it proceeds in the form of oxides. Orig. art. has: 1 table. [WW]

metal evaporation<sup>12</sup>

SUB CODE: 11/ SUBM DATE: 23Apr65/ ORIG REF: 006/ ATD PRESS: 4/70  
Card 1/1 UDC: 541.15+539.163

SEMENOV, I.I.; KUTASHOV, P.D.; ~~GOLUBTSOV, I.Ye.~~, otv. red.;  
SVERDLOVA, I.S., red.; SHEFER, G.I., tekhn. red.

[New equipment for rural automatic telephone stations] No-  
voe oborudovanie dlia sel'skikh ATS; informatsionnyi sbornik.  
Moskva, Svia'izdat, 1962. 62 p. (MIRA 16:5)  
(Telephone, Automatic)

ZHARKOVA, L.P.; MOVSHOVICH, L.A.; FROLOVA, L.G.; ROZITIS, T.Ya.;  
GOLUBTSOV, I.Ya., otr. red.; BAGACHEVA, G.V., red.;  
~~ROMANCOVA, S.F., tekhn. red.~~

[Rural K-40/80 crossbar automatic telephone exchanges]  
Sel'skie koordinatnye ATC K-40/80; informatsionnyi sbornik.  
Moskva, Sviaz'izdat, 1963. 109 p. (MIRA 46:10)

1. Nauchno-issledovatel'skiy institut gorodskoy i sel'skoy  
telefonnoy svyazi Ministerstva svyazi SSSR (for Zharkova,  
Movshovich, Frolova). 2. Gosudarstvennaya elektrotekhn-  
icheskaya fabrika, Riga (for Rudzitis).  
(Telephone)

LIVSHITS, Boris Samoylovich; POLYAK, Petr Yul'yevich. Prinimal  
uchastiye SMIRNOV, N.N.; GOLUBTSOV, I.Ye., otv. red.;  
KOMAROVA, Ye.V., red.; TRISHINA, L.A., tekhn. red.

[Rural telephone communication system] Sistema sel'skoi  
telefonnoi svyazi. Moskva, Svyaz'izdat, 1963. 127 p.  
(MIRA 17:1)

(Telephone)

SHTAGER, Valeriy Vital'yevich; GOLUBTSOV, I.Ya., red.; LEONOVA,  
B.I., tekhn. red.

[Transistor devices in pulse circuits and switching circuits]  
Poluprovodnikovye pribory v impul'snykh i kommutatsionnykh  
skhemakh. Moskva, Gosenergoizdat, 1963. 189 p. (MIRA 16:5)  
(Transistor circuits) (Pulse circuits)  
(Electric networks)



ACC NR: AP6025694

SOURCE CODE: UR/0106/66/000/005/0064/0071

AUTHOR: Golubtsov, I. Ye.; Sazonko, S. M.

ORG: None

TITLE: Setting standards for attenuation in telephone speech tract elements

SOURCE: Elektrosvyaz', no. 5, 1966, 64-71

TOPIC TAGS: telephone equipment, telephone network speech transmission, speech signal, scientific standard

ABSTRACT: A methodology which can be used to establish attenuation standards for the individual sections of a speech tract in local, inter-city, and international telephone communications which will provide for reaching the recommendations made by the International Telegraph and Telephone Consultative Committee (MKKTT) for values of equivalent attenuation (EZ) of transmission and reception volume and intelligibility (AEN) respectively, for 95% and 90% trunking is explained. Standards for attenuation in trunk lines and call circuit trunk lines for dial offices and toll offices (ATS-MTS) and for inter-station trunk lines for local communications are established. Orig. art. has: 2 formulas, 7 tables and 5 figures.

SUB CODE: 17/SUBM DATE: 21Jan66/ORIG REF: 004

Card 1/1

UDC: 621.3.018:8

PROTASOV, V.R.; GOLUBTSOV, K.V.

Some functional characteristics of the eye in the codfish (*Gadus morhua* (L.)) and the marine sculpin (*Myoxocephalus scorpius* (L.)).  
Trudy Inst.morf.shiv. no.13:129-138 '60. (MIRA 13:6)  
(Sense organs--Fishes)  
(Vision)

~~GOLUBTSOV, L.A.~~; GOLUBTSOVA, S.P.; TERLETSKIY, O.I.; KARNAUSHENKO, S.G.;  
SREBNAYA, L.D.

Antifog light filters for automobile headlights. Stek. 1 ker.  
19 no.8:19-20 Ag '62. (MIRA 15:9)  
(Light filters) (Motor vehicles--Lighting)

BIRMAN, A.M.; GAYDUKOV, Yu.A.; GOLUBTSOV, L.B.; ITIN, L.I.;  
KAMENITSER, S.Ye.; MIRONOV, I.N.; TOLSTYKH A.S.; SHIMANSKIY,  
V.P.; SHUVALOV, N.M.; AVETISYAN, Ye., red.; MUKHIN, Yu.,  
tekh. red.

[School of socialist management; book for reading in schools  
for workers studying the economics of industrial enterprises]  
Shkola sotsialisticheskogo khoziaistvovaniia; kniga dlia  
chteniia v shkolakh rabochikh izuchaiushchikh ekonomiku pro-  
myshlennykh predpriatii. Moskva, Gospolitizdat, 1962. 295 p.  
(MIRA 15:9)

(Industrial management)

BIRMAN, A.M.; GERSHKOVICH, I.I.; GOLUBTSOV, L.B.; ITIN, L.I.;  
KAMENITSER, S.Ye.; KONTOROVICH, V.G.; MOROZOV, P.A.;  
TOLSTYKH, A.S.; SHIMANSKIY, V.P.; SHUVALOV, N.M.;  
AVETISYAN, Ye., red.

[School of socialist management; a school reader for workers  
studying the economics of industrial enterprises] Shkola  
sotsialisticheskogo khoziaistvovaniia; kniga dlia chteniia v  
shkolakh rabochikh, izuchaiushchikh ekonomiku promyshlennykh  
predpriatii. Izd.2., perer.i dop. Moskva, Politizdat,  
1964. 318 p. (MIRA 17:8)

8(2)

PHASE I BOOK EXPLOITATION

SOV/1683

Golubtsov, Mikhail Georgiyevich

Elektromekhanicheskiye fil'try radiochastot (Radio-Frequency Electro-mechanical Filters) Moscow, Gosenergoizdat, 1957. 47 p. (Series: Massovaya radiobiblioteka, vyp.282) 25,000 copies printed.

Ed.: P.O. Chechik; Tech. Ed.: K.P. Voronin.

PURPOSE: This booklet is intended for advanced radio amateurs.

COVERAGE: The author describes new types of filters used in radio engineering devices with a nearly rectangular frequency response characteristic. The author explains the role of filters in improving selectivity of radio receivers and points to the difficulties of obtaining a nearly rectangular frequency response characteristic with band filters and ladder-type band-pass filters. Mechanical resonators, according to the author, give much better results because of their very high quality factor and small dimensions.

Card 1/3

Radio-Frequency (Cont.)

SOV/1683

He describes briefly the elements of the theory of oscillation of mechanical bodies and compares it with the theory of electrical oscillations in LC circuits. He explains the operation of the basic types of electromechanical band-pass filters and gives some data on the design, construction, and assembling of such filters for the use of advanced radio amateurs. Several electromechanical filters were investigated at the Institute of Radio Engineering and Electronics of the Academy of Sciences of the USSR. The text is accompanied by photographs, designs, graphs, and tables. No personalities are mentioned. There are 3 references, 2 of which are Soviet and 1 a translation from English.

TABLE OF CONTENTS:

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Physical Principles of the Operation of Electromechanical Filters	5
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Card 2/3	

Radio-Frequency (Cont.)	SOV/1683
Design of Mechanical Filters of the Rod and Laminated Types	20
Precision in Filter Manufacture	31
Filter Manufacturing and Assembling	34
Placing Mechanical Filters in an Electric Circuit and Filter Frequency Response Characteristics	38
Bibliography:	48
AVAILABLE: Library of Congress (TK6565.F5.G6)	

Card 3/3

JP/jab  
6/18/59



G 014 B 1504, M.C.

А. Н. Никитин

Исторические изменения свойств полупроводниковых транзисторов, обусловленные эффектом инжекции носителей заряда

# СЕКЦИЯ ПРИЕМНЫХ УСТРОЙСТВ

Руководитель М. И. Чистов

12 июня

(с 10 до 16 часов)

М. Г. Гайдар

М. Г. Гайдар

М. Г. Гайдар

Принцип устройства для измерения статистических параметров сигнала при трансформации радиотехнических процессов

М. Н. Ветков

Исследование фазовых характеристик сигнала для повышения помехоустойчивости систем связи

В. В. Рязань

Метод определения параметров приращенного сигнала в статистическом анализе

13 июня

(с 10 до 16 часов)

10

В. Н. Шатун

О проблеме построения оптимальных измерительных устройств

М. А. Сулей

М. А. Сулей

Влияние артефактов линейной зависимости сигналов на характеристики усилителя с перестраиваемой частотой в цепи обратной связи и параллельной обратной связи

М. Н. Мухоморов

Коррекция нелинейной фазовой задержки в многоканальных системах связи

В. Н. Савин

Об универсальности оптимальных приемников в линейных ТХВ

Г. Н. Лавров

О. Н. Востров

Метод автоматической регулировки ширины пропускной полосы радиотехнических устройств

# СЕКЦИЯ ПРОВОДНОЙ СВЯЗИ

Руководитель М. И. Гуров

9 июня

(с 10 до 16 часов)

10

report submitted for the Centennial Meeting of the Scientific Technological Society of Radio Engineering and Electrical Communications in. A. N. Popov (VSEI), Moscow, 6-12 June, 1959

31153

9.9000

S/109/60/005/07/003/024

E140/E163

AUTHORS: Remizov, L.T., Golubtsov, M.G., and  
Liuryakin, L.S., (deceased).

TITLE: Receiving Equipment for the Measurement of Statistical  
 Signal Characteristics with Tropospheric Propagation of  
 Radio Waves

PERIODICAL: Radiotekhnika i elektronika, Vol 5, No 7, 1960,  
 pp 1065-1071 (USSR) (+ 1 plate)

ABSTRACT: A brief description is given of a receiving equipment  
 intended for the simultaneous recording of signal-level  
 variations independently of a decimeter-band carrier and the two  
 AM-sidebands for modulation frequencies 115, 346, 520, 1040, 2080  
 and 5200 kos. A complex system of mixers, frequency multipliers  
 and dividers, filters, etc is employed, permitting frequency  
 instabilities introduced by various factors to be cancelled out.  
 The maximum permissible rate of frequency variation compensated by  
 the system is 0.3 cps/sec. The tracking band of the AFC-system  
 is 400 cps, the noise factor of the input circuits is equal to  
 10-11 dB with sensitivity not poorer than 0.01  $\mu$ V. Examples of  
 results obtained are given in Fig 9 for a test on the path  
 Moscow-Vladimir, performed in September 1959.  
 Card 1/2

S1158

8/109/60/005/07/003/024  
E140/E163

Receiving Equipment for the Measurement of Statistical Signal  
Characteristics with Tropospheric Propagation of Radio Waves

Acknowledgements are made to V.A. Kotel'nikov for his assistance  
in selecting the circuits of the receiving equipment, and also to  
A.M. Klestov-Nadeyev for his assistance in the laboratory testing  
of the instruments and to A.N. Lomakin for checking reception of  
signals.

There are 9 figures and 3 references, of which 2 are English and  
1 Soviet.

SUBMITTED: December 23, 1959

Card 2/2

✓

TETERICH, Nikolay Mikhaylovich; GOLUBTSOV, M.G., red.; BORUNOV, N.I., tekhn.  
red.

[Noise generators] Generatory shuma. Moskva, Gos. energ. izd-vo,  
1961. 183 p. (MIRA 14:7)

(Oscillators, Electric)

GOLUBTSOV, Mikhail Georgiyevich; AKSENOV, V.I., red.; YEMZHIN, V.V.,  
tekhn. red.

[Temperature stability of narrow-band electromechanical  
filters] Temperaturnaya stabil'nost' uzkopolosnykh elektro-  
mekhanicheskikh fil'trov. Moskva, Gosenergoizdat, 1962. 59 p.  
(MIRA 15:7)

(Radio filters)

KOTEL'NIKOV, V.A.; APRAKSIN, L.V.; VOYTOV, V.O.; GOLUBTSOV, M.G.;  
DUBROVIN, V.M.; ZAYTSEV, N.M.; KORENBERG, Ye.B.; MINASHIN, V.P.;  
MOROZOV, V.A.; NIKITSKIY, N.I.; PETROV, G.M.; RZHIGA, O.N.;  
SHAKHOVSKOY, A.M.

Radar system used in the Venus probe of 1961. Radiotekh.  
i elektron. 7 no.11:1851-1859 N '62. (MIRA 15:11)

1. Institut radiotekhniki i elektroniki AN SSSR.  
(Radar)  
(Venus probes)

KANEVSKIY, Zinoviy Moiseyevich; FINKEL'SHTEYN, Moisey Ionovich;  
TIKHONOV, V.I., ~~retsensent~~; GOLUBTSOV, M.G., red.;  
BUL'DYAYEV, N.A., tekhn.red.

[Fluctuation noise and radio impulse signal detection]  
Fluktuatsionnaya pomekha i obnaruzhenie impul'snykh ra-  
diosignalov. Moskva, Gosenergoizdat, 1963. 215 p.  
(MIRA 16:8)

(Radio--Interference)  
(Pulse techniques (Electronics))

GOLUBTSOV, M. 


PA 18/49T31

USSR/Medicine - Wounds  
Medicine - Penicillin

Nov 48

"Penicillin Therapy for Trauma," M. G. Golubtsov,  
Asst, Propedeutic Surg Clinic, Belorussian Med  
Inst, 4 1/2 pp

"Khirurgiya" No 11

Describes various cases of penicillin therapy.  
Concludes that cytological method, suggested by  
Petrovskiy and Makarov, can be used to determine  
general course of regenerative process. Penicillin,  
applied locally, acts directly on microflora,  
improving reactive and reparative process in the  
wound. Prolonged contact of penicillin with wound  
 18/49T31

USSR/Medicine - Wounds (Contd)

Nov 48

microflora is achieved when applied locally by  
fractional irrigation method.

 18/49T31



GOLUBTSON, M. O.

USSR/Medicine - Surgery  
penicillin

Dec 48

"Prophylactic Utilization of Penicillin in Abdominal Surgery," M. O. Golubtsov, Chair of Gen Surg, Minsk State Med Inst, 2 pp

"Khirurgiya" No 12

Claims that penicillin is not used to the fullest extent as a prophylaxis against complications in abdominal surgery. Best results were obtained in a number of surgical cases where penicillin was used in the abdominal cavity. Penicillin has rarely effect on the intestinal bacteria which rarely

65/49763

USSR/Medicine - Surgery (Contd)

Dec 48

causes peritonitis. Peritonitis is generally due to mixed infection. A pure culture of intestinal bacteria rarely indicates peritonitis. Chief, Minsk State Med Inst: Prof V. V. Babuk, Hon Worker of Sci.

65/49763

GOLUBTSOV, M. O.

USSR/Medicine - Antibiotics  
Medicine - Penicillin - Therapy  
Feb 49

"Penicillin Therapy of Purulent Ostitis," M. O.  
Golubtsov, Chair of Gen Surg, Minsk Med Inst,  
3/4 p

"Sov Med" No 2

Basic aim of radical surgical measures used in  
treating knee-joint wounds complicated by severe  
purulent infection is to fight the infection.  
Discusses clinical observations and bacterio-  
logical data in cases where penicillin was effec-  
tive. Claims good results were obtained in local  
46/49768

USSR/Medicine - Antibiotics (Contd)  
Feb 49  
penicillin therapy (administered by injection) for  
purulent infections and use of fractional irriga-  
tion.

46/49768

PA 47/49T72

USSR/Medicine - Penicillin, Effect of  
Medicine - Empyema, Therapy

1949

"Penicillinotherapy of Empyema," M. O. Golubtsov,  
Chair of Gen Surg, Minsk State Med Inst, 2 pp

"Vest Khirurgii" Vol LXIX, No 1

Describes method whereby the infected area is incised and irrigated with a penicillin solution with simultaneous drainage of the affected area. Usual penicillin dosage is 100,000 Oxford units to 250 ml of physiological fluid. Treatment consists of 50 - 100 ml of mixed penicillin solution every 12 hours. Authors conclude this method should be given greater practical application.

47/49T72

GOLUBTSOV, M.O., kand.med.nauk

Some problems in modern anesthesiology. Zdrav. Belor. 5 no.10:  
23-26 0 '59. (MIRA 13:2)

1. Glavnyy khirurg Grodnenskogo oblzdravotdela.  
(ANESTHESIOLOGY)

GOLUBTSOV, M.O., kand.med.nauk; SIDOROVICH, M.K., ordinator

Treatment of lumbosacral radiculitis. Zdrav.Bel. 8 no.7:67-68 J1  
'62. (MIRA 15:11)

1. Iz Grodnenskoj oblastnoy bol'nitsy (glavnyy vrach S.G.Dulayev).
2. Nervnoye otdeleniye Grodnenskoj oblastnoy bol'nitsy (for Sidorovich).

(NERVES, SPINAL—DISEASES)

CHUVATOV, V.V.; BEREZIN, N.N.; METSGER, E.Kh.; NAGIN, V.A.; KARTASHOV, N.A., kand. tekhn. nauk, dots.; MIL'KOV, N.V., kand. tekhn. nauk; BYCHKOV, M.I., kand. tekhn.nauk, dots.; SUKHANOV, V.P., SHLYAPIN, V.A.; KORZHENKO, L.I.; ABRAMYCHEV, Ye.P.; KAZANTSEV, I.I.; YARES'KO, V.F.; LUKOYANOV, Yu.N.; DUDAROV, V.K.; BALINSKIY, R.P.; KOROTKOVSKIY, A.E.; PONOMAREV, I.I.; NOVOSEL'SKIY, S.A., kand. tekhn.nauk, dots.; IL'INYKH, N.Z.; TSITKIN, N.A.; ROGOZHIN, G.I.; PRAVOTOROV, B.A.; ORLOV, V.D.; RACHINSKIY, M.N.; KULTYSHEV, V.N.; SMAGIN, G.N.; KUZNETSOV, V.D.; MACHERET, I.G.; SHEGAL, A.V.; GALASHOV, F.K.; ANTIPIN, A.A.; SHALAKHIN, K.S.; RASCHUKTAYEV, I.M.; TISHCHENKO, Ye.I.; FOTIYEV, A.F.; IPPOLITOV, M.F.; DOROSINSKIY, G.P.; ROZHKOV, Ye.P.; RYUMIN, N.T.; AYZENBERG, S.L.; GOLUBTSOV, N.I.; VUS-VONSOVICH, I.K., inzh., retsenzent; GOLOVKIN, A.M., inzh., retsenzent; GUSELETOV, A.I., inzh., retsenzent; KALUGIN, N.I., inzh., retsenzent; KRAMINSKIY, I.S., inzh., retsenzent; MAYLE, O.Ya., inzh., retsenzent; OZERSKIY, S.M., inzh., retsenzent; SKOBLO, Ya.A., dots., retsenzent; SPERANSKIY, B.A., kand. tekhn. nauk, retsenzent; SHALAMOV, K.Ye., inzh., retsenzent; VOYNICH, N.F., inzh., red.; GETLING, Yu., red.; CHERNIKHOV, Ya., tekhn. red.

[Construction handbook] Spravochnik stroitel'ia. Red.kollegiya: M.I. Bychkov i dr. Sverdlovsk, Sverdlovskoe knizhnoe izd-vo. Vol.1. 1962. 532 p. Vol.2. 1963. 462 p. (MIRA 16:5)  
(Construction industry)

GOINBTSOV, N.V., dotsent

Graph for determining momental focal relations of a continuous beam. Trudy VSTI no.1:115-116 '62.

Calculation of complex frames. Ibid.:117-130

(MIRA 17:11)

GOLUBTSOV, Nikolay Vasil'yevich; OGIYENKO, S.I., red.

[Design of statically indeterminate frames] Raschet slozh-  
nykh ram. Ulan-Ude, Buriatskoe knizhnoe izd-vo, 1964. 95 p.  
(MIRA 18:10)



GOLUBTSOV, P.M., inzh.

Production of lids for the top chambers of long-distance  
light signals. Avtom., telem.i sviaz' 3 no.7:36 J1 '59.  
(MIRA 12:12)

1. Orshanskaya distantsiya signalizatsii i svyazi Belorusskoy  
dorogi.  
(Railroads--Signaling)

GOLUBTSOV, P.M., inzh.

Collective of communist labor. Avtom., telem. i svyaz'. 4 no. 5:21-22  
My '60. (MIRA 13:8)

1. Orshanskaya distantiya signalizatsii i svyazi Belorusskoy  
dorogi.

(Railroads--Signaling)

(Railroads--Communication systems)

USSR/Electricity - Conductors  
Standards-

GOLUBTSOV, R.A.

Apr 53

"Discussion of the Article by A. A. Glazunov, A. A. Glazunov [sic], and G. E. Rozanov, 'Economically Feasible Ratio of Aluminum and Steel Sections in Steel-Aluminum Conductors,' " M. N. Krachkovskiy, Cand Tech Sci, Giproenergoprojekt; Engr R. A. Golubtsov, Teploelektroproyekt

Elektrichestvo, No 4, pp 84-86

Krachkovskiy and Golubtsov, in separate comments, discuss merits and important aspects of proposal by Glazunov et al (Elektrichestvo, No 5, 1952) to revise standard GOST-339-41 on steel-aluminum conductors.

258T32

GOLUBTSOV, R.A.

AID P - 3455

Subject : USSR/Electricity

Card 1/2 Pub. 27 - 22/32

Author : Golubtsov, R. A., Eng.

Title : Use of steel flexible towers (Discussion of an article by M. L. Gal'pern, B. A. Udovichenko, and K. N. Voyevodin, this journal, No. 12, 1954)

Periodical : Elektrichestvo, 10, 73-74, 0 1955

Abstract : The author discusses the statements made in the article criticized that the use of flexible suspension towers increases the reliability of 35-kv transmission lines and reduces the expense of supporting structures and their foundations. He disagrees with these statements and gives detailed reasoning, formulae and data from experience. One table, 3 Soviet references (1952-1953).

GOLUBTSOV, R.A., inzh.; GRINEV, S.M., inzh.; GROSHEV, N.I., inzh.

Forty years development of electric transmission lines: Elek.sta.  
28 no.11:53-58 N '57. (MIRA 10:11)  
(Electric power distribution)

*GOLUBTSOV, R.A.*

GOLUBTSOV, R.A., inzh.; KARSAULIDZE, A.N., kand.tekhn.nauk.

Calculation of straight-line poles of overhead lines for  
outage conditions. Elek.sta. 29 no.1:63-64 Ja '58. (MIRA 11:2)  
(Electric lines--Poles)

SOV/91-59-8-25/28

8(6), 14(6)

AUTHOR:

Golubtsov, R.A.

TITLE:

The Suspension of Open Air Line Wires Carrying Different Voltages on One and the Same Towers

PERIODICAL:

Energetik, 1959, Nr 8, pp 39 (USSR)

ABSTRACT:

I.S. Kenigstul (Poltava) requested information whether a 6-10 kv and a 380 v line may be suspended on the same towers. The author states that this is possible if the following requirements are met: a) the line carrying the higher voltage must be suspended higher than the low voltage line, or, it must be mounted on the other side of the tower; b) the spacing of conductors carrying different voltages and the calculations for conductors and towers, must be made in accordance with the requirements for conductors carrying the higher voltage.

Card 1/1

GOLUBTSOV, R.A., inzh.; KARSAULIDZE, A.N., kand.tekhn.nauk

Calculating steel-aluminum wires according to the new "Regulations  
for the installation of electric units." Elek.sta. 31 no.1:  
60-62 Ja '60. (MIRA 13:5)

(Electric wiring--Tables, Calculations, etc.)



BOSHNYAKOVICH, A.D., inzh.; GOLUBTSOV, R.A., inzh.; KARSAULIDZE, A.N.,  
kand.tekhn.nauk

Calculation of steel reinforced aluminum lines using the con-  
sideration of a temporary stretch. Elek. sta. 31 no.9:50-54  
S '60. (MIRA 14:10)

(Electric lines—Overhead)

GOLUBTSOV, R.A.; KARASULIDZE, A.N.; KESEL'MAN, L.M.; SINELOBOV, K.S.

"Fundamentals of the mechanical section of overhead power transmission lines" by A.A.Glazunov, A.A.Glazunov. Reviewed by R.A.Golubtsov.  
Elektrichestvo no.6:91-96 Je '61. (MIRA 14:10)

1. Vsesoyuznyy gosudarstvennyy institut po proyektirovaniyu teplovykh elektrostantsiy, Moskva (for Golubtsov). 2. Vsesoyuznyy nauchno-issledovatel'skiy institut elektroenergetiki, Moskva (for Karaulidze). 3. Vsesoyuznyy gosudarstvennyy institut po proyektirovaniyu teplovykh elektrostantsiy, Tashkent (for Kesel'man). 4. Vsesoyuznyy trest po proyektirovaniyu gidroelektrostantsiy i gidroelektrozlov, Leningrad (for Sinelobov).

(Electric power distribution)

GOLUBTSOV, R.A.

Location of connectors installed with weak clamps on 220 kv.  
power transmission lines. Energetik 10 no.1:35 Ja '62.

(MIRA 14:12)

(Electric lines---Overhead)

GOLUBTSOV, R.A., inzh.; KARSAULIDZE, A.N., kand.tekhn.nauk

Changes and additions to Chapter II-5 "Overhead power transmission lines with voltages in excess of 1,000 volts" of the "Regulations for the Installation of Electric Power Systems." Energetik 10 no.12:21-24 D '62. (MIRA 16:1)  
(Electric lines--Overhead) (Electric power distribution)

GOLUBTSOV, R.A., inzh.; KRYUKOV, K.P., inzh.; NOVGORODTSEV, B.P., inzh.

Loads acting on the intermediate towers as a result of the  
stress of the wire during the break in the lines. Elek. sta.  
34 no.1:51-55 Ja '63. (MIRA 16:2)

(Electric lines—Overhead)  
(Electric lines—Poles and towers)

GOLUBTSOV, R. A.

Suspended radio rediffusion lines on uprights of a 6 kv. electric power transmission line. Energetik 8 no.5:39 My '60.

(Electric lines—Overhead)  
(Radio lines)

(MIRA 13:8)

GOLUBTSOVA, R.B.

Rapid method of determining iron in alloys. Trudy Inst.mat. no.5:  
193-195 '60. (MIRA 13:6)

(Alloys--Analysis)

(Iron--Analysis)

GOLUBTSOV, S.A.

USSR/Chemistry • Silicon  
Chemistry • Organic Compounds

Mar/Apr 49

"Silicon Organic Compounds," K. S. Andrianov, A. A. Zhdanov, S. A. Golubtsov, H. V. Sobolevskiy, Moscow, 40 pp

"Uspekhi Khim" Vol XVIII, No 2

Discusses: chemical bonds, halide derivatives, orthosilicic acid esters, alkyl- and arylhalidosilanes, hydrolysis and condensation of organic silicon monomers, polysiloxanes, use of silicon organic compounds, preparation of hydrophobic films, thermostable resins and lacquers, polysiloxane fluids and lubricants, and polysiloxane rubber.

PA 47/49721



GOLUBTSOV, S. A.

FD 194

USSR/Chemistry - Silicon-organic Compounds

Card 1/1

Authors : Romanov, V. M., Candidate of Chemical Sciences; Golubtsov, S. A., Candidate of Technical Sciences.

Title : Organosilicon liquids and their applications

Periodical : Khim. prom. 4, 25-28 (217-220), June 1954

Abstract : Describe in detail the properties and applications of organosilicon liquids, pointing out that products of this class are now being manufactured by enterprises of the Ministry of Chemical Industry. Six USSR references, all since 1940; 68 foreign references.

ANDRIANOV, K.A.; ROMANOV, V.M., kandidat khimicheskikh nauk;  
GOLUBTSOV, S.A., kandidat tekhnicheskikh nauk.

Hydrophobing fluid and some other silicon organic fluids.  
Khim. prom. no.3:142-143 Ap-My '56.

(MLRA 9:10)

1. Chlen-korrespondent AN SSSR (for Andrianov).  
(Silicon--Organic compounds)

USSR/ Physical Chemistry - Kinetics. Combustion. Explosives. Topochemistry.  
Catalysis

B-9

Abs Jour : Referat Zhur - Khimiya, No 4, 1957, 11292

Author : Andrianov K.A., Golubtsov S.A., Trofimova I.V., Denisova A.S.,  
Turetskaya R.A.

Inst : Academy of Sciences USSR

Title : On the Role of Copper in the Reaction between Ethyl Chloride and Silicon

Orig Pub : Dokl. AN SSSR, 1956, 108, No 3, 465-468

Abstract : A study was made of the influence of Cu-content of silicon-copper alloys on their interaction with  $C_2H_5Cl$  (I); among the reaction products were found  $C_2H_5SiHCl_2$ ,  $C_2H_5SiCl_3$ ,  $(C_2H_5)_2SiHCl$ ,  $(C_2H_5)_2SiCl_2$  (II) and a number of liquid and gaseous products. Catalytic activity of alloys was evaluated on the basis of the content, in the reaction products, of II, the formation of which takes place according to the most advantageous reaction:  $2C_2H_5Cl + Si \rightarrow (C_2H_5)_2SiCl_2$ , involving no loss of organic radicals. With decrease in Cu-content of the alloy from 70 to 5%, content of II in the reaction products increases from 20 to 45-50%. It is shown that drop in catalytic activity of alloys with high Cu-content is due not to thermal

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USSR/ Physical Chemistry - Kinetics. Combustion. Explosives. Topochemistry.  
Catalysis

B-9

Abs Jour : Referat Zhur - Khimiya, No 4, 1957, 11292

decomposition of products (which is slight under the conditions of the synthesis), but to catalytic decomposition of I in the presence of Cu, according to the reaction:



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CIA-RDP86-00513R000515920009-0"

GOLUBTSOV, S. A.

20-4-21/52

AUTHORS: Mal'nova, G. N., Mikheyev, Ye. P.,  
Klebenskiy, A. L., Golubtsov, S. A., and  
Filimonova, N. P.

TITLE: On the Catalytic Phenylation of Hydrogenous Alkyl-  
Chlorosilanes by Benzene (O kataliticheskom fenilirovani  
vodorod~~soderzhashchikh~~ alkilkhlorosilanov benzolom).

PERIODICAL: Doklady AN SSSR, Vol. 117, Nr 4, pp. 623-625 (USSR) -1957

ABSTRACT: This reaction of the alkylchlorosilanes mentioned in the  
title above with aromatic hydrocarbons has been treated  
only insufficiently in scientific literature. A short  
literary review reveals among other facts that as yet in  
almost every case elements from the third group of the  
periodic system have been used as catalyzers. The authors  
preferred to use boric acid as a catalyzer sufficiently  
active and fitting for their purpose. If it is added to the  
reaction mixture in a quantity of 0,1% the formation of  
phenyl-trichlorosilane is restrained almost completely.  
Otherwise there is hardly any possibility of separating it  
from methyl-phenyl-dichlorosilane by rectification. The  
increase of compression in the autoclave - chiefly caused by

Card 1/3

On the Catalytic Phenylation of Hydrogenous Alkyl-  
Chlorosilanes by Benzene

20-4-21/52

elimination of hydrogen ceases, according to the temperature of synthesis, at 290° after one hour, at 250° after two hours. Warming for a longer time is not profitable (see patents, references 2-4,6) as in that case the exploit of the final product decreases. With 0,1% boric acid the optimal temperature is by 240°. If the temperature is caused to fall by 5-10° the reaction is decisively retarded. The comparatively small exploit of alkyl-phenyl-dichlorosilane is caused on the whole by the high capability of reaching of the alkyl-dichlorosilanes which suffer not only phenylation but different other transformations such as changes of thermal rearrangement, condensation, and reaction with alkyl-phenyl-dichlorosilane. The details of table 2 confirm the assumption that the augmentation of the proportion of benzene will increase the exploit of alkyl-phenyl-dichlorosilane. Under optimal conditions it reaches 40% of the reacting methyl-dichlorosilane. Finally by-products are mentioned. The reciprocal reaction of benzene and ethyl-dichlorosilane in presence of boric acid is analogous. The optimal temperature is about 250°.

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On the Catalytic Phenylation of Hydrogenous Alkyl-  
Chlorosilanes by Benzene

20-4-21/52

There are 2 tables, and 7 references, 1 of which is Slavic.

PRESENTED: June 28, 1957, by B. A. Kazanskiy, Academician

SUBMITTED: June 27, 1957

AVAILABLE: Library of Congress

Card 3/3

*GOLOBTSOV, S.A*

AUTHORS: Andrianov, K. A., Golubtsov, S. A., Semenova, Ye.A.62-1-8/29

TITLE: On Some Reactions of the Amino-Group in Triethylaminosilane  
(O nekotorykh reaktsiyakh aminogruppy v trietilaminosilane).

PERIODICAL: Izvestiya AN SSSR Otdeleniye Khimicheskikh Nauk, 1958, Nr 1,  
pp 47-53 (USSR)

ABSTRACT: In recent time the aminosilanes gained an constantly increasing practical importance as active hydrophobizing products. However, only few is mentioned in literature about the chemical properties of these compounds. In the present paper some reactions (with the silicon atom of the amino group) were investigated by means of the example of triethylsilane and its methyl- and ethyl-derivatives. Triethylaminosilane easily reacts with hydrochloric- and hydrobromic acid. The authors obtained derivatives of the triethylaminosilane as well as derivatives of methyl which have not yet been described in literature by the interaction of triethylchlorosilane with ammonia (or the corresponding amine). Table 1 shows the physical properties of the synthetic compounds. In the investigation of these properties it turned out that the have sufficient thermal stability. Triethylaminosilane reacts only with difficulty with

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## On Some Reactions of the Amino-Group in Triethylaminosilane

62-1-8/29

triethylchlorosilane (at room temperature). The reaction can be a little accelerated at boiling temperature. Table 2 shows the properties of the (by triethylethoxysilane) obtained compounds. Furthermore the authors found properties of new compounds, e.g. of triethyl-n-propoxysilane, triethylisopropoxysilane, triethyl-n-butoxysilane, triethylisobutoxysilane, triethylisoamiloxy-silane as well as of triethyl-n-octiloxy-silane. Ethyl- and methyl- derivatives of triethylaminosilane react with alcohols in a similar manner, Here the number and the size of the radicals in the nitrogen atom exercise their influence on the reaction process. Triethyldiethylaminosilane enters reaction with alcohols, however, with a considerably lower activity than triethylaminosilane, its methyl-derivatives or triethylaminosilane. There are 3 tables and 7 references, 1 of which is Slavic.

SUBMITTED: August 22, 1956

AVAILABLE: Library of Congress

1. Triethylaminosilane-Chemical reactions 2. Amines-Chemical reactions 3. Triethylaminosilane-Derivatives 4. Methyl-Derivatives

Card 2/2

Golubtsov S.A.

AUTHORS: Andrianov, K. A., Golubtsov, S. A., 62-2-5/28  
Trofimova, I. V., Turetskaya, R. A., Krylov, V. D.

TITLE: On the Modifications of the Catalytic Activity of Silicon-Copper Alloys in the Process of Direct Synthesis of Ethylchlorosilanes (Ob izmeneniyakh kataliticheskoy aktivnosti kremnednykh splavov v protsesse pryamogo sinteza etilkhlorosilanov).

PERIODICAL: Izvestiya AN SSSR Otdeleniye Khimicheskikh Nauk, 1958, Nr 2, Pp. 157-165 (USSR).

ABSTRACT: The direct synthesis of alkyl- and arylchlorosilanes by the influence of the haloid derivative upon elementary silicon in the presence of a copper catalyst was already described in several papers. But only scarce and insufficient data exist on the fact that the activity of the contact silicon-copper mass slowly decreases in the process of synthesis. Concrete reports on the reason for the modification of activity have hitherto not been published. In the present paper the following is said on the result of the experiment: It was found that in the interaction of the silicon-copper alloys with ethylene chloride their activity is highly re-

Card 1/2

On the Modifications of the Catalytic Activity of Silicon- 62-2-5/28  
-Copper Alloys in the Process of Direct Synthesis of Ethylchlorosilanes.

duced, i.e. to the extent to which silicon enters into reaction (formation of ethylchlorosilanes). It was found that for alloys with a low content of copper (5-9%) the lines of the general activity in the reaction of the formation of diethylchlorosilane run over 2 maxima. In alloys with a high copper-content (~25%) the presence of only one selective maximum and one maximum of the general activity was determined. It is assumed that the interaction of ethyl chloride with silicon-copper alloys is composed of two parallel processes: a) the reaction with silicon of the intermetallic compound  $Cu_3Si$  with simultaneous separation of active copper; b) reaction with free silicon in the presence of the separated copper as catalyst. On the basis of this hypothesis the variability for alloys with a diverse content of copper can be explained. During the reaction carbon is to a considerable extent deposited at the surface of copper which may also contribute to a decrease in the activity of the mass. There are 2 figures, 7 tables, and 5 Slavic references.

SUBMITTED:  
AVAILABLE:  
Card 2/2

August 22, 1956

Library of Congress

1. Silicon-copper alloy catalysts 2. Ethylchlorosilanes-Synthesis

PETROV, A.D.; ANDRIANOV, K.A.; GOLUBTSOV, S.A.; PONOMARENKO, V.A.;  
CHERKAYEV, V.G.; TARASOVA, A.S.; VAVILOV, V.V.; ZADOROZHNIY, N.A.;  
POPELEVA, G.S.

Continuous method of catalytic addition of hydrosilanes to unsaturated compounds. Khim.nauk i prom. 3 no.5:679-681 '58.

1. Institut organicheskoy khimii im. V.D. Zelinskogo.  
(Silane) (Unsaturated compounds)

SOV/64-58-6-6/15

AUTHORS: Andrianov, K. A., Corresponding Member, Academy of Sciences, USSR, Golubtsov, S. A., Candidate of Technical Sciences, Petryakova, A. A.

TITLE: The Composition and Distribution of the Reaction Products of Ethylene Chloride and Silicon (Sostav i razdeleniye produktov reaktsii khloristogo etila s kremniyem)

PERIODICAL: Khimicheskaya promyshlennost', 1957, Nr 6, pp 342-346 (USSR)

ABSTRACT: The article quotes the results of the experiments mentioned by the title. The synthesis was carried out by reaction of ethylene chloride with a copper-silicon alloy at boiling temperature according to a method that has already been described (Refs 4, 5). The composition of the mixture was determined in cooperation with M. A. Kleynovskaya. A table states the basic conditions in three experiments. Furthermore, a sketch of the laboratory column used for isolating individual ethylchlorosilanes and a description of the apparatus is given. A distillation curve shows that a column with 24 theoretical plates permits a sufficiently accurate isolation of the mixture. A table of the physico-chemical

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SOV/64-58-6-6/15

The Composition and Distribution of the Reaction Products of Ethylene Chloride and Silicon

constants and analytical data of isolated distillation products is given. An analysis of fraction 5 was carried out. It was assumed that besides ethylchlorosilane there were also 5 to 10 per cent of diethylchlorosilane present. In order to determine the optimum ratio of ethyl-trichlorosilane and isobutanol in partial esterification according to a method previously described, a number of tests were carried out. On the basis of the data obtained, a pilot plant with a column for rectification of the ethylchlorosilane mixture was built. The results of the tests were as they had been calculated. M. A. Kleynovskaya has developed a method for separating the mixture from trimethyl-chlorosilane and silicon tetrachloride by means of partial esterification. There are 4 figures, 8 tables, and 11 references, 6 of which are Soviet.

Card 2/2



Р0614137500 S. A.

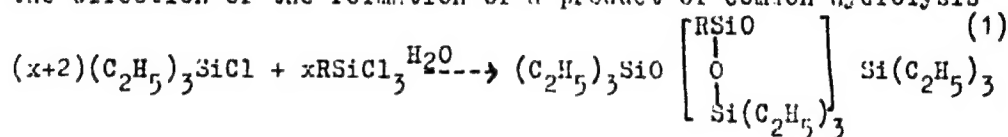
AUTHORS: Andrianov, K. A., Levshuk, M.Ya., Golubtsov, S.A., and  
Krasovskaya, T.A. 79-2-11/64

TITLE: On the Common Hydrolysis of Mono- and Trifunctional Alkyl(Arilyl)  
Chlorine Silanes (O sovmeestnom gidrolize mono- i trifunktsional'  
nykh alkil(aril) khlorosilanov)

PERIODICAL: Zhurnal Obshchey Khimii, 1958, Vol. 28, Nr 2, pp. 333 - 336 (USSR)

ABSTRACT: The synthesis of most polymeric organosilicon compounds of the type  
of polyorganosiloxanes takes place by means of a common hydrolysis  
of two, sometimes more, monomeric organosilicon compounds - alkyl -  
or alkylchlorosilanes or substituted ethers of orthosilicic acid.  
It is usually assumed that in a hydrolysis of mixtures of two al-  
kylchlorosiloxanes a polymeric product of the common hydrolysis of  
these compounds forms. The authors found that the reaction often  
proceeds in the direction of a mixture of two polymers and not in  
the direction of the formation of a product of common hydrolysis

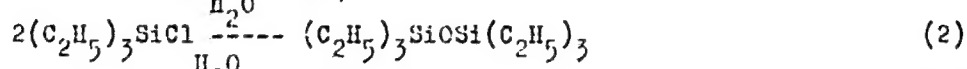
Card 1/2



79-2-11/64

On the Common Hydrolysis of Mono- and trifunctional Alkyl(Aryl) Chlorine Silanes

where R = C<sub>6</sub>H<sub>5</sub> or C<sub>6</sub>H<sub>4</sub>Cl.



As the test showed, neither the change of the molar interactions and the acid content of the medium nor the use of one or the other solvent in the hydrolysis were capable of suppressing reactions (2) and (3) and leading the process toward the formation of a common product of hydrolysis according to reaction (1). It was assumed that the temperature coefficients of the reaction velocity are different. A test confirmed this assumption and showed that the performance of the hydrolysis at higher temperatures promotes the production of products of the common hydrolysis, but not the mechanical mixture of two polymers. There are 2 figures, 2 tables, and no references.

SUBMITTED: January 19, 1957

AVAILABLE: Library of Congress

Card 2/2

SOV/80-59-1-32/44

AUTHORS: Andrianov, K.A., Golubtsov, S.A., Tishina, M.N. and Trofimova, I.V.

TITLE: Direct Synthesis of Phenyltrichlorosilane in a "Fluidized" Bed  
(Pryamoy sintez feniltrikhlorsilana v "kipyashchem" sloye)

PERIODICAL: Zhurnal prikladnoy khimii, 1959, Nr 1, pp 201-207 (USSR)

ABSTRACT: The authors investigated the synthesis of phenyltrichlorosilane out of chlorobenzene, hydrogen chloride and silicon in a "fluidized" bed in the presence of copper and iron as catalyzers at a temperature of approximately 600°C. The experiments performed showed the possibility of attaining the high efficiency of the process, the satisfactory yield of phenyltrichlorosilane, approximately 11 g from 100 g of the contact mass per hour, and sufficiently complete utilization of silicon, 60%. There are 7 tables and 5 references, 1 of which is Soviet and 4 American.

SUBMITTED: May 29, 1957

Card 1/1

GOLUBTSOV, S. A.

N. N. Tishina, K. A. Andranov, S. A. Golubtsov, M. I. Kafyrov and R. L. Darashkevich, "The Reaction of Phenylizing the Trichlorsilane."

Report presented at the Second All-Union Conference on the Chemistry and Practical Application of Silicon-Organic Compounds held in Leningrad from 25-27 September 1958.

Zhurnal prikladnoy khimii, 1959, Nr 1, pp 238-240 (USSR)